



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,099	09/30/2003	David D. Brandt	02AB201/YOD ALBR:0123	4810
7590	06/07/2004			EXAMINER
Alexander M. Gerasimow Allen-Bradley Company, LLC 1201 South Second Street Milwaukee, WI 53204-2496				ESTRADA, ANGEL R
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/675,099	BRANDT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Angel R. Estrada	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-37 is/are pending in the application.
  - 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 14-37 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-13, drawn to an electrical component system, classified in class 174, subclass 59.
  - II. Claims 14-37, drawn to a rail system, classified in class 174, subclass 27.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the insulative support, the first and second data conductors supported lengthwise on the support and disposed between the power conductors, and the uninsulated conducive rails are not required. The subcombination has separate utility such as open rail system for transmitting power and data signals.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Patrick Yoder on April 2, 2004 a provisional election was made without traverse to prosecute the invention of Group II, claims 14-37. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Brandt et al (US 6,095,867, hereinafter Brandt).

Regarding claim 14, Brandt discloses a rail system (16) for transmitting power and data signals comprising: an insulative support (62, see figure 9); first and second power conductors (244 or 218) supported lengthwise on the support (62) and configured to conduct electrical power (column 3 lines 5-7); and first and second data conductors (244 or 218) supported lengthwise on the support (62) and disposed between the power conductors and configured to transmit data signals (column 3 lines 5-7).

Regarding claim 15, Brandt discloses the system (16), wherein the power conductors (218) at least partially shield the data conductors (218) from electromagnetic interference (see figure 3).

Regarding claim 16, Brandt discloses the system (16), further comprising at least one capacitor (124) coupled across the power conductor (see figure 3, column 7 lines 45-47 or column 3 lines 12-14).

Regarding claim 18, Brandt discloses the system (16), wherein the conductors (218, or 244) are uninsulated conductive rails (see figures 9 or 13)

Regarding claim 19, Brandt discloses the system (16), wherein the first and second data conductors (218) are spaced from one another by a first, substantially constant predetermined distance (see figure 9).

Regarding claim 20, Brandt discloses the system (16), wherein the first and second power conductors (218) are spaced from respective data conductors (218) by a second substantially constant predetermined distance.

Regarding claim 21, Brandt discloses the system (16), wherein the first predetermined distance is equal to the second predetermined distance (see figure 13,).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17, and 22-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barndt et al (US 6,095,867, hereinafter Brandt).

Regarding claim 17, Barndt discloses the claimed invention except for a second set of power conductors supported lengthwise on the support. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 3 USPQ 8.

Regarding claim 22, Brandt discloses a rail system (16) for transmitting power and data signals comprising: an insulative support (62) a first set of power conductors (218 or 244) supported lengthwise on the support and configured to conduct electrical power (column 3 lines 5-7); and first and second data conductors (218 or 244) supported lengthwise on the support and configured to transmit data signals (column 3 lines 5-7); but Brandt lacks a second set of power conductor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add

a second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 3 USPQ 8.

Regarding claim 23, the modified Brandt discloses the system (16), wherein if the first set of power conductors (218, 244) can be identified as A and B, the second set of power conductors can be identified as C and D, and the data conductors (218, 244) can be identified as E and F, the conductors are disposed cross-sectionally on the support (62) in the order A, C, E, F, D, B.

Regarding claim 24, Brandt discloses the system (16), wherein conductors (218, 244) A and B can be configured to transmit ac power (column 3 lines 5-7).

Regarding claim 25, the modified Brandt discloses the system (16), wherein conductors C and D can be configured to transmit dc power (column 3 lines 5-7).

Regarding claim 26, the modified Brandt discloses the system (16), wherein if the first set of power conductors (218, 244) can be identified as A and B, the second set of power conductors can be identified as C and D, and the data conductors (218, 244) can be identified as E and F, the conductors are disposed cross-sectionally on the support (62) in the order A, E, C, D, F, B. Additionally, it has been held that rearranging parts, of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 27, Brandt discloses the system (16), wherein conductors (218, 244) A and B can be configured to transmit ac power (column 3 lines 5-7).

Regarding claim 28, the modified Brandt discloses the system (16), wherein conductors C and D can be configured to transmit dc power (column 3 lines 5-7).

Regarding claim 29, Brandt discloses the system (16), further comprising a first capacitor (124) coupled across the first set of power conductors (see figure 3, column 7 lines 45-47 or column 3 lines 12-14).

Regarding claim 30, the modified Brandt discloses the claimed invention except for a second capacitor coupled across the second set of power conductors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a capacitor to the second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 3 USPQ 8.

Regarding claim 31, Brandt discloses the system (16), wherein the conductors (218 or 244) are disposed at substantially equal spacing across the support (see figures 9 and 13).

Regarding claim 32, Brandt discloses an open rail system (16) for transmitting power and data signals comprising: an insulative support (62); first and second data conductors (218 or 244), supported lengthwise on the support (62) and configured to transmit data signals (column 3 lines 5-7); a first set of power conductors (212 or 244) supported lengthwise on the support (62) at positions flanking the data conductors (212 or 244) and configured to conduct electrical power (column 3 lines 5-7); and a capacitor (124) coupled across the first set of power conductors (see figure 3, column 7 lines 45-47 or column 3 lines 12-14); but Brandt lacks a second set of power conductors supported lengthwise on the support at positions flanking respective power conductors of the first set. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second set of power conductors, since it has

been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 3 USPQ 8.

Regarding claim 33, the modified Brandt discloses the claimed invention except for a second capacitor coupled across the second set of power conductors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a capacitor to the second set of power conductors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 3 USPQ 8.

Regarding claim 34, Brandt discloses the system (16), wherein the first set of power conductors transmits dc power (column 3 lines 5-7).

Regarding claim 35, the modified Brandt discloses the system (16), wherein the second set of power conductors transmits ac power (column 3 lines 5-7).

Regarding claim 36, Brandt discloses the system (16), wherein the first set of power conductors transmits ac power (column 3 lines 5-7).

Regarding claim 37, the modified Brandt discloses the system (16), wherein the second set of power conductors transmits dc power (column 3 lines 5-7).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis et al (US 5,295,843), Watanabe (US 6,490,169), Berg et al (US 5,980,324), Malkowski, Jr. et al (US 6,487,091), Weidler (US 5,213,518) and Briechle et al (US 5,553,412)

Art Unit: 2831

5. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Angel R. Estrada

May 27, 2004



5/28/04

DEAN A. REICHARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800